Pearson Education, Inc., publishing as Prentice Hall

Thinking Mathematically Student Edition

This general survey of mathematical topics helps diverse students, with different backgrounds and career plans, to succeed in mathematics. Blitzer provides the applications and technology students need to gain an appreciation of mathematics.

The author's goal is to demonstrate how mathematics can be applied to students' lives in interesting, enjoyable, and meaningful ways.

Teacher Edition

0131752065		$84.97
Thinking Mathematically Instructor's Edition		

Essential Items

Ancillary Items

0132391236		$1,200.00
Thinking Mathematically - MathXL 100-Pack		
0132391228		$300.00
Thinking Mathematically - MathXL 25-Pack		
0201726114		$20.00
Thinking Mathematically - MathXL Single-Student Access		
0131347403		$94.97
Thinking Mathematically - Student Edition with Student Workbook		

Free with Purchase items

0131347381	Thinking Mathematically - Student Workbook	$23.97
Free upon request, 1 per Teacher User, with a minimum purchase of 25 Student Editions		
0131752073	Thinking Mathematically - TestGen	$49.97
Free upon request, 1 per Teacher User, with a minimum purchase of 25 Student Editions		
0131752081	Thinking Mathematically - Instructor Solutions Manual	$18.97
Free upon request, 1 per Teacher User, with a minimum purchase of 25 Student Editions		
0131752138	Thinking Mathematically - CD Lecture Series	$25.97
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0131752200	Thinking Mathematically - Student Solutions Manual	$18.97
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ISBN
0131346784

Contract Price
$84.97

Grade
10, 11, 12

TYPE
P1

Copyright
2008

Author
Blitzer

Edition
4th

Content
Advanced Topics in Math, High School Math 4

Readability
10.0 Dale-Chall

Accessibility
none

Research

Provided by the Publisher

ISBN 0131346784	Publisher - **Pearson Education, Inc., publishing as Prentice Hall**		
Thinking Mathematically Student Edition			
Type - P1	Author - Blitzer		
Copyright - 2008	Edition - 4th	Readability - 10.0 Dale-Chall	
Course - High School Math 4		Grade(s) - 10, 11, 12	
Teacher Edition ISBN if applicable 0131752065			

Provided by the Publisher

Overall Recommendation: **Recommended as BASAL**

if this box is not checked, the evaluators have chosen NOT recommend as basal

Overall Strengths, Weaknesses, Comments:

The text covers a large range of POS topics. The text is appropriate for 11th and 12th grade students who need an additional math course. The text provides numerous types of questions for the students and engages them in real-life applications in order to learn the mathematics topics. The text goes beyond the POS and provides some higher level mathematical ideas. The chapters stand alone and thus the instructor can choose which topics will be taught and the sequence.

NIMAC Accessibility	NONE
Ancillary	Yes
Free with Purchase	Yes
Research	No

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CRITERIA

This basal resource …

A. Encompasses KY Content Standards & Grade Level Expectations **Strong Evidence**

Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 5 Big Ideas of mathematics to the following extent:	
a) Number Properties and Operations	Strong Evidence
b) Measurement	Strong Evidence
c) Geometry	Strong Evidence
d) Data Analysis and Probability	Strong Evidence
e) Algebraic Thinking	Strong Evidence
2) Addresses content-specific enduring understandings from the related Program of Studies standards.	Strong Evidence

3) Addresses content-specific skills and concepts from the related Program of Studies standards.	Strong Evidence
4) Content addressed is current, relevant and non-trivial	Strong Evidence
5) Provides opportunities for critical thinking/reasoning	Strong Evidence

6) Strengths, Weaknesses, Comments:

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

The book is written for 11th or 12th grade students who need an additional math course. The text contains many different topics and could serve as a review prior to graduation. The chapters stand alone, so the instructor can choose which topics to cover and what order they can be taught.

B. Functionality & Suitability — Moderate Evidence

1) Suitability — **Strong Evidence**

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) Content quality — **Strong Evidence**

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community
- Interconnections among mathematical topics

3) Connections to Literacy — **Strong Evidence**

- Employs a variety of reading levels and is grade/level appropriate
- Use of multiple representations-concrete, visual/spatial, graphs, charts, etc.
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- The text is engaging and facilitates learning
- Embedded activities enhance the understanding of the text
  Note: may apply to either student or teacher editions

4) Connections to Technology — **Moderate Evidence**

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data
- Embeds web links as a mathematics resource.

5) Support for Diverse Learners **Little or No Evidence**

- Provides support for ESL students
- Provides support for differentiation of instruction in diverse classrooms
- Challenge for gifted and talented students
- Support for students with learning difficulties
  Note: may apply to either student or teacher editions

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The text is written on an advanced reading level. It would not be appropriate for younger students. There are writing, critical thinking, application, and group exercises. Vocabulary is given in paragraph form. Each section begins with a scenario to engage the student in the lesson. There are a few references to graphing calculators, etc. This text may be appropriate for a classroom that doesn't have a set of graphing calculators. The teacher edition does not provide any information on differentiation, ESL, gifted and talented, or students with learning disabilities. The text does provide many examples and different questions (applications, writing, etc.) to help in this manner. The text is written as a college-type book.

C. Supports Inquiry and Skill Development — Strong Evidence

1) Promotes Inquiry, research and Application of Learning Strong Evidence

- Provides opportunities for inquiry and research that includes activities such as gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions, formulating authentic questions to deepen and extend mathematical reasoning.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, generalizing, justifying, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, number lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.
  Note: may apply to either teacher or student edition

2) Skill Development Strong Evidence

- Provides opportunities to make sense of all mathematics
- Provides opportunities to recognize, create, and extend patterns.
- Provides opportunities for critical thinking and reasoning.
- Provides opportunities to justify/prove responses.
- Provides opportunities to ask deeper questions.
- Contains embedded activities (or extensions) that emphasize use of technology for problem

solving
Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

The text provides different activities and exercises including technology, application, writing, and critical thinking. These engage the students in different questioning levels and provide some differentiation of assessment. There are numerous activities and scenarios with graphs and pictures that are current and relevant to the students. All questioning levels are covered by the extensive exercise sets and instruction.

D. Supports Best Practices of Teaching and Learning — Moderate Evidence

1) Engages Students — Strong Evidence

- Includes content geared to the needs, interests, and abilities of all students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated
  Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction — Moderate Evidence

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels
  Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

The scenario approach engages the student from the start. Examples and instruction are interesting and relevant to the students. Due to the nature of the topics, the instructor can choose the depth of learning necessary as well as which topics will be covered. The exercises for each section are very useful and provide variety. There are no quizzes included, and the end of the chapter tests do not include the same variety as the section exercises. There is a review included prior to the chapter tests.

E. Has an Organization/ Format that Supports Learning and Teaching — Moderate Evidence

1) Organizational Quality — Moderate Evidence

- Print and/or electronic materials present minimal barriers to learners, but also add encouragement for students to stretch and make further explorations.
- Presents chapters/lessons in an organized and logical sequence

- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components, interactive software, calculators, physical and virtual manipulatives) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text) Little or No Evidence

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The reading level is age appropriate and the layout allows the reader to see important information and examples. There is not an overwhelming amount of reading for the students. There is little use of outside technology, although there are exercises aimed at the use of technology. There are no components outside of the teacher and student edition. The teacher edition merely contains the solutions in addition to the student text.

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

Moderate Evidence

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving
- Provides opportunities for intervention.

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The ancillary materials include an instructor's solution manual, student solutions manual, test generator, and student workbook. The solution manuals contain step-by-step solutions to the problems. The student workbook contains additional exercises and solutions for more student practice.